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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,498	12/30/2003	Asha R. Keddy	ITL1051US (P17705)	8753
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SIKRI, ANISH				
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2443				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/748,498

**Applicant(s)**

KEDDY ET AL.

**Examiner**

ANISH SIKRI

**Art Unit**

2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 8-19, 21, 22, 24-26 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-19, 21, 22, 24-26 and 31-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. Claims 5-7, 20, 23, 27-30 are cancelled.

### **2. Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

4. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

6. Determining the scope and contents of the prior art.
7. Ascertaining the differences between the prior art and the claims at issue.
8. Resolving the level of ordinary skill in the pertinent art.
9. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. **Claims 1-4, 8-12, 14-17, 19, 21, 24-26, 31-33** are rejected under 35 U.S.C 103(a) as being unpatentable over Wertheimer et al (US Pat 6601085) hereafter known as Wertheimer, and in view of Mills et al (US Pat 7327754) hereafter known as Mills.

12. Consider Claim 19, Wertheimer discloses an interconnect apparatus comprising: a network interconnect device to couple to a network and to a first hub (Wertheimer, Fig 1, Col 1 Lines 10-20, Wertheimer discloses on how hubs and DTE's are connected to each other in a network) the first hub comprising a plurality of device ports and an uplink port (Wertheimer, Fig 1, Col 1 Lines 10-20, Wertheimer clearly discloses on how first hub is connected to other hubs in the network) via a first channel that is to couple the uplink port of the first hub to the network interconnect device (Wertheimer, Fig 1, Col 1 Lines 10-15, Wertheimer discloses that the hub is a 4 port switch, providing 4 channels of communication), wherein a first network device is to couple to a first device port of the first hub via a second channel (Wertheimer, Fig 1, Col 1 Lines 10-15 Wertheimer clearly show on how first network device is coupled to hub and connected to the second network, as this common in the art), and wherein a concatenated hub comprising a plurality of device ports and an uplink port is to couple to a second device port of the first hub via a third channel (Wertheimer, Fig 1, Col 1 Lines 10-15 Wertheimer clearly show on concatenated hub is used for connected to multiple networks/hubs and DTE's),

and a second network device is to couple to a device port of the concatenated hub via a fourth channel (Wertheimer, Fig 1, Col 1 Lines 10-15, Wertheimer discloses that the hub is a 4 port switch, providing 4 channels of communication). It is common in the art to see hub, switches, and nodes to be able to connect to each other in myriads of ways. And hubs/switches having multiple of ports provide numerous channels of communication to the devices connected to it.

13. But Wertheimer does not explicitly disclose wherein the network interconnect device includes an article including a machine-readable storage medium onto which there are written instructions that, if executed by the network interconnect device, are effective to cause the network interconnect device to transmit a predetermined signal over the control a state of a physical layer (PHY) of the first network device and a state of a PHY of the second network device to connect/disconnect the first and second network devices to/from the network.

14. Nonetheless, Mills discloses the network interconnect device includes an article including a machine-readable storage medium onto which there are written instructions that (Mills, Col 7 Lines 26-30, Mills discloses that the central management station is responsible for managing all pc/workstations, network devices in the network), if executed by the network interconnect device (Mills, Col 7 Lines 26, Mills discloses that the network interconnect device can be a central management station as all devices are network connected in the network), are effective to cause the network interconnect device to transmit a predetermined signal over control a state of a physical layer (PHY) of the first network device and a state of a PHY of the second network device to

connect/disconnect the first and second network devices to/from the network (Mills, Col 7 Lines Col 30-40, Mills disclosed the WOL "wake-on lan" Col 7 Lines 7-12, feature which allows to control the PHY state of the network devices by enabling them to be powered on or powered off from the network by a command send from the management station).

15. Both Wertheimer-Mills provide features to management of physical states of the devices in the network. Therefore one of ordinary skill in the art would have been motivated to combine the teachings since both are within the same environment.

16. Therefore, it would have been obvious to a person skilled in the art at the time of the invention was made to incorporate the use of Wake-on Lan feature to enabling controlling the physical state of the networked device, taught by Mills, in the system of Wertheimer, for the purpose of management of networked devices in the network.

17. Consider Claim 21, Wertheimer-Mills discloses an interconnect apparatus as defined in Claim 19, wherein transmission of the predetermined signal is effective to control a power state of the PHY of the network device (Mills, Col 7 Lines Col 30-40, Mills disclosed the WOL "wake-on lan" Col 7 Lines 7-12, feature which allows to control the PHY state of the network devices by enabling them to be powered on or powered off from the network by a command send from the management station).

18. Consider Claim 24, Wertheimer-Mills discloses an interconnect apparatus as defined in Claim 19, wherein the transmission of the predetermined signal over the first channel to the first hub (Wertheimer, Fig 1, Col 1 Lines 10-20, Wertheimer discloses on how hubs and DTE's are connected to each other in a network) is effective to connect/disconnect the second network device to/from the network (Mills, Col 7 Lines Col 30-40, Mills disclosed the WOL "wake-on lan" Col 7 Lines 7-12, feature which allows to control the PHY state of the network devices by enabling them to be powered on or powered off from the network by a command send from the management station).

19. Consider Claim 25, Wertheimer-Mills discloses an interconnect apparatus as defined in Claim 24, wherein transmission of the predetermined signal is effective to control a power state of the PHY of the second network device (Mills, Col 7 Lines Col 30-40, Mills disclosed the WOL "wake-on lan" Col 7 Lines 7-12, feature which allows to control the PHY state of the network devices by enabling them to be powered on or powered off from the network by a command send from the management station).

20. Consider Claim 1, it has similar limitations as Claim 19, therefore it is rejected under the same rational as Claim 19. See motivation to combine above.

21. Consider Claim 2, it has similar limitations as Claim 21, therefore it is rejected under the same rational as Claim 21. See motivation to combine above.

22. Consider Claim 4, it has similar limitations as Claim 24, therefore it is rejected under the same rational as Claim 24. See motivation to combine above.

23. Consider Claim 8, it has similar limitations as Claim 25, therefore it is rejected under the same rational as Claim 25. See motivation to combine above.

24. Consider Claim 9, Wertheimer discloses a method comprising: coupling a master network interconnect device to a network (Wertheimer, Fig 1, Col 1 Lines 10-20, Wertheimer discloses on how hubs and DTE's are connected to each other in a network, Wertheimer, Fig 1, Col 1 Lines 10-20, Wertheimer clearly discloses on how first hub is connected to other hubs in the network); coupling a slave network interconnect device to the master network interconnect device via first channel (Wertheimer, Fig 1, Col 1 Lines 10-15 Wertheimer clearly show on how first network device is coupled to hub and connected to the second network, as this common in the art, via first channel); coupling the slave network interconnect device to a network device via a second channel Wertheimer, Fig 1, Col 1 Lines 10-15 Wertheimer clearly show on concatenated hub is used for connected to multiple networks/hubs and DTE's).

25. But Wertheimer does not explicitly disclose transmitting a predetermined signal from the master network interconnect device to the slave network interconnect device so as to cause the slave network interconnect device to transmit a signal via the second



channel to control a state a physical (PHY) of the network device that is coupled to the slave network interconnect device.

26. Nonetheless, Mill discloses transmitting a predetermined signal from the master network interconnect device (Mills, Col 7 Lines 26-30, Mills discloses that the central management station is responsible for managing all pc/workstations, network devices in the network) to the slave network interconnect device so as to cause the slave network interconnect device to transmit a signal via the second channel to control a state a physical (PHY) of the network device that is coupled to the slave network interconnect device (Mills, Col 7 Lines Col 30-40, Mills disclosed the WOL "wake-on lan" Col 7 Lines 7-12, feature which allows to control the PHY state of the network devices by enabling them to be powered on or powered off from the network by a command send from the management station).

27. Both Wertheimer-Mills provide features to management of physical states of the devices in the network. Therefore one of ordinary skill in the art would have been motivated to combine the teachings since both are within the same environment.

28. Therefore, it would have been obvious to a person skilled in the art at the time of the invention was made to incorporate the use of Wake-on Lan feature to enabling controlling the physical state of the networked device, taught by Mills, in the system of Wertheimer, for the purpose of management of networked devices in the network.

29. Consider Claim 10, it has similar limitations as Claim 21, therefore it is rejected under the same rational as Claim 21. See motivation to combine above.

30. Consider Claim 11, it has similar limitations as Claim 9, therefore it is rejected under the same rational as Claim 9. See motivation to combine above.
31. Consider Claim 12, it has similar limitations as Claim 10, therefore it is rejected under the same rational as Claim 10. See motivation to combine above.
32. Consider Claim 14, it has similar limitations as Claim 9, therefore it is rejected under the same rational as Claim 9. See motivation to combine above.
33. Consider Claim 15, it has similar limitations as Claim 9, therefore it is rejected under the same rational as Claim 9. See motivation to combine above.
34. Consider Claim 16, it has similar limitations as Claim 11, therefore it is rejected under the same rational as Claim 11. See motivation to combine above.
35. Consider Claim 17, it has similar limitations as Claim 25, therefore it is rejected under the same rational as Claim 25. See motivation to combine above.
36. Consider Claim 31, Wertheimer-Mills discloses the apparatus of Claim 1, wherein the second network interconnect device is to transmit a first signal to the DTE equipment (Wertheimer, Fig 1, Col 1 Lines 10-20, Wertheimer discloses on how hubs

and DTE's are connected to each other in a network) responsive to the predetermined signal to cause the DTE equipment to be disconnected from the network (Mills, Col 7 Lines Col 30-40, Mills disclosed the WOL "wake-on lan" Col 7 Lines 7-12, feature which allows to control the PHY state of the network devices by enabling them to be powered on or powered off from the network by a command send from the management station).

37. Consider Claim 32, Wertheimer-Mills discloses the apparatus of Claim 1, wherein the second network interconnect device is to transmit a second signal (Wertheimer, Fig 1, Col 1 Lines 10-15 Wertheimer clearly show on how first network device is coupled to hub and connected to the second network, as this common in the art) to the DTE equipment (Wertheimer, Fig 1, Col 1 Lines 10-20, Wertheimer discloses on how hubs and DTE's are connected to each other in a network) responsive to the predetermined signal to cause the DTE equipment to be connected from the network (Mills, Col 7 Lines Col 30-40, Mills disclosed the WOL "wake-on lan" Col 7 Lines 7-12, feature which allows to control the PHY state of the network devices by enabling them to be powered on or powered off from the network by a command send from the management station).

38. Consider Claim 33, Wertheimer-Mills discloses the apparatus of Claim 31, wherein the second network interconnect device is to transmit the first signal to a third interconnect device coupled to the second network interconnect device via a third channel (Wertheimer, Fig 1, Col 1 Lines 10-15 Wertheimer clearly show on concatenated hub is used for connected to multiple networks/hubs and DTE's) to a

cause a second DTE equipment to be disconnected from the network (Mills, Col 7 Lines Col 30-40, Mills disclosed the WOL "wake-on lan" Col 7 Lines 7-12, feature which allows to control the PHY state of the network devices by enabling them to be powered on or powered off from the network by a command send from the management station), the third network interconnect device coupled to the DTE equipment via a fourth channel (Wertheimer, Fig 1, Col 1 Lines 10-15 Wertheimer clearly show on concatenated hub is used for connected to multiple networks/hubs and DTE's, Wertheimer discloses on how multiple devices/network can be connected).

39. **Claims 3, 13, 18, 22, and 26** are rejected under 35 U.S.C 103(a) as being unpatentable over Wertheimer et al (US Pat 6601085) hereafter known as Wertheimer, and in view of Mills et al (US Pat 7327754) hereafter known as Mills, and in further view of Dea et al (US Pat 5,742,833) hereafter known as Dea.

40. Consider Claim 3, it has similar limitations as Claim 22, therefore it is rejected under the same rational as Claim 22. See motivation to combine above.

41. Consider Claim 13, it has similar limitations as Claim 22, therefore it is rejected under the same rational as Claim 22. See motivation to combine above.

42. Consider Claim 18, it has similar limitations as Claim 22, therefore it is rejected under the same rationale as Claim 22. See motivation to combine above.

43. Consider Claim 22, Wertheimer-Mills does not explicitly disclose the interconnect apparatus as defined in Claim 21, wherein the predetermined signal is a heartbeat signal.

44. Nonetheless, Dea discloses the predetermined signal is a heartbeat signal (Dea, Col 7 Lines 42-44, Dea disclosed the use of heartbeat signal in the management of network devices).

45. Both Dea and Wertheimer-Mills provide features to management of physical states of the devices in the network. Therefore one of ordinary skill in the art would have been motivated to combine the teachings since both are within the same environment.

46. Therefore it would have been obvious to a person skilled in the art at the time of the invention to have made to incorporate the use of heartbeat feature to enabling monitoring the physical state of the networked device, taught by Dea, in the system of Wertheimer-Mills, for the purpose of management of networked devices in the network.

47. Consider Claim 26, Wertheimer-Mills does not explicitly disclose the interconnect apparatus as defined in Claim 19, wherein the predetermined signal is a heartbeat signal.

48. Nonetheless, Dea discloses the predetermined signal is a heartbeat signal (Dea, Col 7 Lines 42-44, Dea disclosed the use of heartbeat signal in the management of network devices).

49. Both Dea and Wertheimer-Mills provide features to management of physical states of the devices in the network. Therefore one of ordinary skill in the art would have been motivated to combine the teachings since both are within the same environment.

50. Therefore it would have been obvious to a person skilled in the art at the time of the invention to was made to incorporate the use of heartbeat feature to enabling monitoring the physical state of the networked device, taught by Dea, in the system of Wertheimer-Mills, for the purpose of management of networked devices in the network.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-4, 8-19, 21-22, 24-26, 31-33 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH SIKRI whose telephone number is 571-270-1783. The examiner can normally be reached on 8am - 5pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anish Sikri  
a.s.

Oct 23, 2009

/Tonia LM Dollinger/  
Supervisory Patent Examiner, Art Unit 2443